

**SARDAR PATEL UNIVERSITY**  
**Bsc (VI Sem.) Examination**  
**Saturday, 13 April 2013**  
**3 - 6 pm**  
**Biochemistry**  
**US06CBCH05 – Immunology**

**Total Marks: 70**

- Q.1 Select proper option from following MCQs: [10]
- (1) From the following, which one is not involved in secondary lymphoid organ.  
(a) Spleen (b) Bone marrow  
(c) Lymphnode (d) MALT
  - (2) Tc cell can recognize antigen, which are represented by \_\_\_\_\_ molecules.  
(a) Class-I MHC molecule (b) Class- II MHC molecule  
(c) Class- III MHC molecule (d) None of above
  - (3) \_\_\_\_\_ immunoglobulin can cross the Placenta.  
(a) IgA (b) IgD  
(c) IgE (d) IgG
  - (4) \_\_\_\_\_ immunoglobulin which is produced first by the fetus in response to infection is \_\_\_\_\_ .  
(a) IgA (b) IgD  
(c) IgG (d) IgM
  - (5) Graft-versus host reaction is caused by \_\_\_\_\_ .  
(a) T-Lymphocytes (b) B-Lymphocytes  
(c) Macrophages (d) Complement
  - (6) Cancer cells are characterized by \_\_\_\_\_  
(a) Metastasis (b) Invasion of local tissues  
(c) Uncontrolled growth (d) All of above
  - (7) MHC complex in Human, recognized as \_\_\_\_\_ .  
(a) H-2 Complex (b) TNF Complex  
(c) HLA Complex (d) none of above
  - (8) Which type of Hypersensitivity is immune complex mediated Hypersensitivity?  
(a) Type I (b) Type II  
(c) Type III (d) Type IV
  - (9) Transfusion reaction is a \_\_\_\_\_ Hypersensitivity reaction.  
(a) Type I (b) Type II  
(c) Type III (d) Type IV
  - (10) Which one of the following is not responsible for Active immunity ?  
(a) Vagines (b) Natural infection  
(c) Toxoid (d) Antitoxin

- Q.2 Answer in very short (**Any Ten**) [20]
- (1) Define acquired immunity and explain role of TH cell in Acquired immunity.
  - (2) Give the difference between active immunity and passive immunity.
  - (3) Write the role of WBC and NK cells in immunity.
  - (4) Write function of IgG.
  - (5) Write general features of Ag-Ab reaction.
  - (6) Give reason : IgM is more efficient compared to IgG to neutralize viral infectivity.
  - (7) Write difference between class-I and class-II MHC molecule.
  - (8) Define: Allograft and Autograft.
  - (9) What do you know about TSTAS and TATAS ?
  - (10) Define: Immunization and Vaccines
  - (11) Write the difference between immediate and delayed types of Hypersensitivity.
  - (12) Write in short : Autoimmunity.
- Q.3 Explain in detail:
- (a) Give the difference between Innate Immunity and Acquired Immunity. [05]
  - (b) Write short note on Thymus. [05]
- OR**
- Q.3 Answer the following:
- (a) Explain Lymphocytes in detail [05]
  - (b) Give brief information about Classical Complement Pathway. [05]
- Q.4 Write short note on:
- (a) IgG [05]
  - (b) RIA [05]
- OR**
- Q.4 Write short on
- (a) Mechanism of agglutination [05]
  - (b) AIDS [05]
- Q.5 Write short note on
- (a) HLA Complex [05]
  - (b) Allograft reaction [05]
- OR**
- Q.5 Explain in detail:
- (a) Structure of Class-II MHC molecules. [04]
  - (b) Molecular basis of Antibody diversity. [06]
- Q.6 Explain in detail Type-III Hypersensitivity. [10]
- OR**
- Q.6 Explain in detail Type-IV Hypersensitivity. [10]